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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,226	01/17/2002	Patrice Hameau	T2146-907703	2631

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EXAMINER

PARTHASARATHY, PRAMILA

ART UNIT PAPER NUMBER

2136

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,226

Applicant(s)

HAMEAU ET AL.

Examiner

Pramila Parthasarathy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/17/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

AT

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in France on 5/17/2005. It is noted, however, that applicant has not filed a certified copy of the 00/06882 application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner. An initialed copy of IDS is attached to this office action.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Method for implementing and securing a typed data language in an embedded system.

4. Amended Abstract is accepted and entered.

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5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

6. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings contain handwritten labels and crossed out labels. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 3 - 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one

skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The dependent Claim 3 reads, " ... a first elementary stack....and a second elementary stack...", Claim 5 reads "....stacks variable...".

With respect to " ... a first elementary stack....and a second elementary stack...", although the specification discloses "Each of the storage areas ... constitutes an elementary stack.", the specification does not disclose " ... a first elementary stack....and a second elementary stack...". The specification does not indicate how the typed objects are stored in a first elementary stack corresponding to a data area and a second elementary stack corresponding to a local variable area.

With respect to "stacks variable", although the specification discloses "A type information element is specifically associated ... each local variable....", the specification does not disclose "stacks variable". The specification does not indicate how the "typed information elements ...to make a size of said stack variable, based on said objects to be manipulated.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 5 recites the limitation "said stacks variable" in line 4. There is insufficient antecedent basis for this limitation in the claim.

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9. Claim 6 recites the limitation "said type information elements flags" in line 4.

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1 – 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Schwabe (U.S. Patent Number 6,651,186).

11. Regarding Claim 1, Schwabe teaches before execution of instructions of said sequence, performing a continuous verification operation to determine whether a match exists between one of a type of instructions and an expected type indicated by said type information elements stored in said second series of storage locations (Column 14 line 58 – Column 15 line 45 and Column 16 lines 28 – 65); and

authorizing execution of said instructions sequence only when there is a match between said type of predetermined instructions and the expected type (Column 16 lines 28 – 65).

12. Regarding Claim 7, Schwabe teaches a computer data processor; and a memory for storing type information elements, said memory including a second series of locations for storing said type information elements, associated with each of said typed data, in order to specify a type of said typed data (Column 18 line 46 – Column 19 line 23), and

a program for continuously verifying, prior to execution of predetermined instructions in said sequence, a match between a type indicated by said instructions and a type indicated by said type information elements, so as to authorize said execution only when there is a match between said types (Column 14 line 58 – Column 15 line 45; Column 16 lines 28 – 65 and Column 19 line 18 – Column 20 line 45).

13. Claim 2 is rejected applied as in rejecting Claim 1. Furthermore, Schwabe teaches wherein each of said type information elements includes a string of bits stored in storage locations of said second series that correspond one-to-one with storage locations in said first series in which said associated typed data are stored, and wherein a configuration whereof represents on of said types of typed data (Column 14 line 58 – Column line 45 and Column 16 lines 8 – 65).

14. Claim 3 is rejected applied as in rejecting Claim 1. Furthermore, Schwabe teaches wherein said instructions are written in Java language and said typed data are constituted by typed objects, wherein said computer system includes a Java virtual machine in the form of software for manipulating said typed objects, wherein said

storage locations in said memory of the computer system are organized into stacks comprising a given maximum number of levels, each level constituting one of said storage locations (Column 14 line 58 – Column 15 line 45),

wherein said typed objects are stored in at least a first elementary stack corresponding to a data area and a second elementary stack corresponding to a local variable area (Column 14 line 58 – Column 15 line 13 and Column 15 line 60 – Column 16 line 28), and

wherein said type information elements are distributed into two additional elementary stacks that correspond one-to-one with said first and second elementary stacks, in order to specify the type of said associated objects stored in said data and local variable areas (Column 14 line 58 – Column 15 line 45 and Column 16 lines 28 – 65).

15. Claim 4 is rejected applied as in rejecting Claim 1. Furthermore, Schwabe teaches wherein when there is no match in said performing step, execution of said instruction sequence is interrupted and replaced by execution of instructions corresponding pre-programmed security measures (Column 19 lines 42 – Column 20 line 5 and Column 20 line 56 – Column 21 line 27).

16. Claim 8 is rejected applied as in rejecting Claim 7. Furthermore, Schwabe teaches wherein said first series of locations in said memory is organized into stacks

comprising a given maximum number of levels, each of said levels constituting one of said storage locations (Column 14 lines 10 – 55 and Column 17 lines 1 – 22),

wherein said typed data are stored in at least a first elementary stack called a data area and a second elementary stack called a local variable area (Column 17 lines 1 – 50), and

wherein said second series of storage locations is organized into elementary stacks that correspond one-to-one with said first and second elementary stacks (Column 17 lines 1 – 50).

17. Claim 10 is rejected applied as in rejecting Claim 7. Furthermore, Schwabe teaches further including an embedded smart card (Column 18 lines 15 – 52).

18. Claim 5 is rejected applied as in rejecting Claim 3. Furthermore, Schwabe teaches wherein said type information elements are associated with additional information elements that determine a size of said storage locations in said stacks storing said typed objects, in order to make a size of said stacks variable, based on said objects to be manipulated (Column 17 lines 23 – 50).

19. Claim 6 is rejected applied as in rejecting Claim 3. Furthermore, Schwabe teaches marking objects associated with said type information elements flags to indicate whether said objects should be saved in said stacks or can be erased (Column 17 lines 12 – 37 and Column 23 lines 9 – 61).

20. Claim 9 is rejected applied as in rejecting Claim 1. Furthermore, Schwabe teaches wherein said type information elements stored in said second series of storage locations are associated with additional information elements that determine a size of said storage locations in said stacks storing said typed data (Column 17 lines 23 – 50).

Conclusion

21. Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO Form 892.

Applicant is urged to consider the references. However, the references should be evaluated by what they suggest to one versed in the art, rather than by their specific

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disclosure. If applicants are aware of any better prior art than those are cited, they are required to bring the prior art to the attention of the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pramila Parthasarathy whose telephone number is 571-272-3866. The examiner can normally be reached on 8:00a.m. To 5:00p.m.. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-232-3795. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR only. For more information about the PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pramila Parthasarathy

September 28, 2005.


AYAZ SHEIKH
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